



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/457,013	12/08/1999	MARK E HOLZBACH	M-8620 US	7201

24251 7590 04/04/2002

SKJERVEN MORRILL MACPHERSON LLP
25 METRO DRIVE
SUITE 700
SAN JOSE, CA 95110

EXAMINER

WINSTEDT, JENNIFER E

ART UNIT PAPER NUMBER

2872

DATE MAILED: 04/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant N .

09/457,013

Examiner

Jennifer E Winstedt

Applicant(s)

HOLZBACH, MARK E

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 23 January 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 1/23/02 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Claim Objections

2. Claim 21 is objected to because of the following informalities:

Claim 21 recites the limitation "the high resolution image sources" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim. The phrase "high resolution" was taken out of claim 17, from which claim 21 depends.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 2872

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 3, 9, 14, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Woodgate et al. (U.S. Patent 6,008,484).

Claims 1, 3, 9, 14, and 15 are rejected for the reasons given in the last Office Action.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 4-7, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodgate et al. in view of Official Notice.

Claims 2, 4-7, 11, and 12 are rejected for the reasons given in the last Office Action.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woodgate et al. in view of Official Notice as applied to claims 2, 4-7, 11, and 12 above, and further in view of Iwata et al. (U.S. Patent 5,982,342).

Art Unit: 2872

Claim 13 is rejected for the reasons given in the last Office Action.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woodgate et al. in view of Iwata et al.

Claim 8 is rejected for the reasons given in the last Office Action.

9. Claims 10, 16-18, 22, 23, 25-27, 29, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodgate et al. in view of Burger (U.S. Patent 5,973,844).

Claims 10, 16-18, 22, 23, 25-27, 29, and 32 are rejected for the reasons given in the last Office Action.

10. Claims 20, 28, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodgate et al. in view of Burger as applied to claims 10, 16-18, 22, 23, 25-27, 29, and 32 above, and further in view of Iwata et al.

Claims 20, 28, and 31 are rejected for the reasons given in the last Office Action.

11. Claims 19, 21, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodgate et al. in view of Burger as applied to claims 10, 16-18, 22, 23, 25-27, 29, and 32 above, and further in view of Ashihara et al. (5,883,739).

Claims 19, 21, and 30 are rejected for the reasons given in the last Office Action.

12. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woodgate et al. in view of Burger as applied to claims 10, 16-18, 22, 23, 25-27, 29, and 32 above, and further in view of Official Notice.

Claim 24 is rejection for the reasons given in the last Office Action.

R s p o n s t o A r g u m n t s

Art Unit: 2872

13. In light of the amendments made to the drawings and the specification, the objections to the drawings and specification is withdrawn.

14. In light of the amendments made to the claims, the 112 2nd paragraph rejections to the claims are withdrawn.

15. Applicant's arguments filed 1/23/02 have been fully considered but they are not persuasive.

The applicant argues that Woodgate does not disclose to suggest a plurality of lenslet pixel modules with each module defined in part by a respective lenslet. The examiner points out that Figure 20 of Woodgate shows a parallax optic (3) that is made up of a plurality of lenslets and that each of the lenslets together with respective pixels (2) define a lenslet pixel module. Therefore, Woodgate discloses a plurality of lenslet pixel modules defined in part by a respective lenslet.

The applicant argues that Woodgate does not disclose that each lenslet pixel module corresponds to a *pixel* of the three-dimensional image. The examiner points out that the lenslets that make up the parallax optic and their respective pixels when used together form a three-dimensional image (column 1, lines 7-8). In order for this to happen, each lenslet must direct the light from at least one ^{of} the pixels to the right and/or left eye of the viewer. The lenslets must then correspond to the pixel whose light it is directing. Therefore, it can be said that each lenslet pixel module, which is defined in part by a respective lenslet, corresponds to a pixel of the three-dimensional image. The claim does not require that each lenslet pixel module correspond to only one or to different pixels of the three-dimensional image.

Art Unit: 2872

The applicant argues that nothing in Figure 20 or in its description discloses or suggests that each lenslet corresponds to a pixel of a three-dimensional image and that element 3 of Figure 20 is simply called a parallax optic in the specification of Woodgate. The examiner points out that all of the embodiments disclosed in Woodgate are directed to autostereoscopic three dimensional displays. In order for a display such as one shown in Figure 20 to actually display a three-dimensional image, each element of the parallax image 3 has to correspond to a pixel of a three-dimensional image, such as described in column 1, line 51-55. It is also noted that the parallax optic shown in Figure 20 is a lenticular screen made up of lenslets, each one corresponding to at least one pixel 2 of the three-dimensional image.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2872

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer E Winstedt whose telephone number is (703) 305-0577. The examiner can normally be reached on 7:30-17:00 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JW
March 26, 2002



Cassandra Spyrou
Supervisory Patent Examiner
Technology Center 2800